

**Method and System for Evaluating the Quality of
Packet-Switched Voice Signals**

ABSTRACT

5 A method and apparatus for determining what level of performance must be maintained by
a second communication service so as to be perceived as being of equal quality to a first
communication service, especially where the second communication service is subject to
additional impairments not experienced by the first communication service. In one example
10 embodiment, the present invention is applied to determining what combinations of packet loss rate
and packet delay are tolerable where a packet switched telephony service is desired to be
perceived to be substantially equivalent to a traditional toll-quality non-packet-switched telephone
service. Empirically derived models are used to relate user perception to objectively measurable
15 characteristics, such as packet loss rate.